

## 1994 Ford Explorer

SUSPENSION - FRONT (4WD COIL SPRING) 1994 SUSPENSION Ford Motor Co. Suspension - Front (4WD) Coil Spring

### SPINDLE & SHAFT ASSEMBLY

#### Removal

1. Raise and support vehicle. Remove wheel assembly. Remove caliper from rotor. Remove locking hub. See [AUTOMATIC LOCKING HUBS](#) or [MANUAL LOCKING HUBS](#) under REMOVAL & INSTALLATION.
2. Remove wheel bearings, lock nuts, hub and rotor. Remove spindle-to-steering knuckle nuts. Tap spindle with plastic hammer to free spindle from steering knuckle. See [Fig. 9](#) . Remove spindle, spindle seat (if equipped) and splash shield.
3. On right side applications, remove and discard keystone clamp from shaft assembly and stub shaft. Slide rubber boot onto stub shaft. Remove shaft assembly from right axle. See [Fig. 9](#) .
4. Remove left shaft assembly (if required). On all applications, wrap spindle in protective cloth and place second step of spindle in soft-jawed vise.
5. On Explorer and Ranger, remove oil seal using slide hammer and Seal Remover (TOOL-1175-AC). Remove needle bearing from spindle. Press seal from shaft assembly. See [Fig. 9](#) .
6. On Bronco and F150, remove needle bearing and oil seal using slide hammer and Cup Puller (T77F-1102-A). Press seal from shaft assembly.

#### Installation

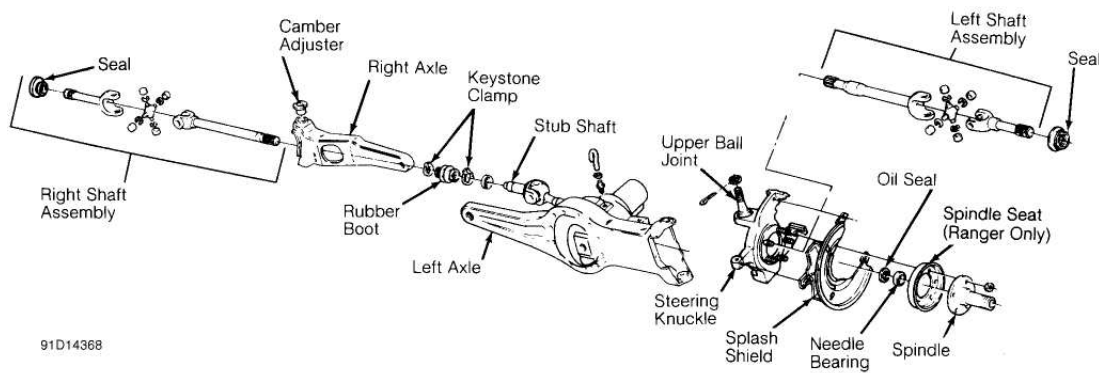
1. Clean all dirt and grease from spindle bearing bore. Ensure bearing bore is free of nicks and burrs. On Explorer and Ranger, install seal on shaft assembly using press and Seal Installer (T83T-3132-A).
2. On Bronco and F150, install seal on shaft assembly, with seal lip toward spindle. On right side applications, install rubber boot and NEW keystone clamps on stub shaft. Install right shaft assembly into stub shaft, with stub shaft missing spline aligned with shaft assembly.
3. Ensure splines are fully engaged. Install rubber boot over assembly and tighten keystone clamps. On left axle applications, install shaft assembly through steering knuckle, and engage in splines.
4. Install needle bearing in spindle, with manufacturer identification mark facing away from spindle bore. For bearing installation, use Handle (T80T-4000-W), and Bearing/Seal Installer (T83T-3123-A for Explorer and Ranger; T80T-4000-S for Bronco and F150).

**CAUTION: Install spindle needle bearing with manufacturer's identification mark away from spindle bore.**

5. Using Bearing/Seal Installer (T83T-3123-A for Explorer and Ranger; T80T-4000-T for Bronco and F150), install seal in spindle with seal lip facing away from spindle. Coat seal lip with multipurpose grease. Install spindle and splash shield.
6. To install remaining components, reverse removal procedure. Adjust wheel bearings. See [WHEEL BEARING ADJUSTMENT](#) under ADJUSTMENTS & INSPECTION.

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**Fig. 9: Exploded View Of Spindle & Components**

Courtesy of FORD MOTOR CO.

### STEERING KNUCKLE

#### Removal

1. Remove the spindle and steering shaft assembly. Refer to **SPINDLE & SHAFT ASSEMBLY** under REMOVAL & INSTALLATION. Disconnect steering linkage from steering knuckle.
2. Remove cotter pin and loosen ball joint nuts. Strike steering knuckle near ball joint to release ball joint. Remove ball joint nuts. Note position of camber adjuster on top of axle. See [Fig. 9](#). Remove camber adjuster and steering knuckle.

**CAUTION: Camber adjuster must be installed in original location to maintain proper wheel alignment.**

#### Installation

To install, reverse removal procedure. Ensure camber adjuster is installed in original position. Install NEW nuts on ball joints. Install remaining components.

### BALL JOINT

**NOTE: Always remove lower ball joint before removing upper ball joint. Install lower ball joint before installing upper ball joint. DO NOT heat ball joint or axle to aid in installation.**

#### Removal

1. Remove steering knuckle. See **STEERING KNUCKLE** under REMOVAL & INSTALLATION. Remove snap ring from bottom ball joint socket.
2. Assemble "C" Frame (T74P-4635-C) and Receiver Cup (T83T-3050-A for Explorer and Ranger; D80T-3010-A2 for Bronco and F150) on the lower ball joint. See [Fig. 10](#) -13.

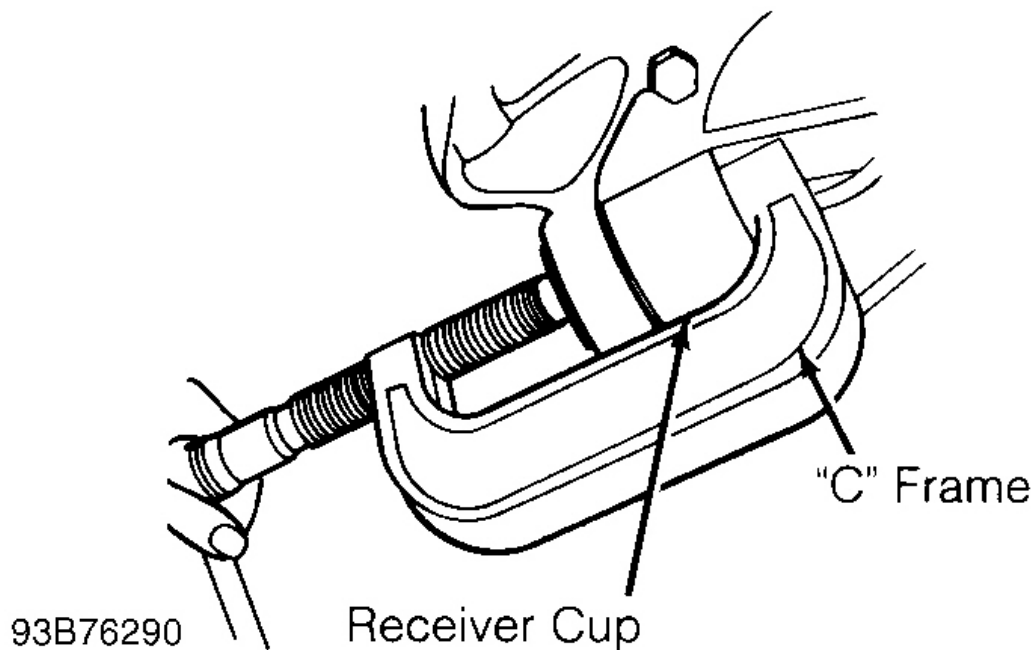
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3. Turn forcing screw clockwise until lower ball joint is removed from spindle. Repeat procedure to remove upper ball joint. See **Fig. 10** -13.

### Installation

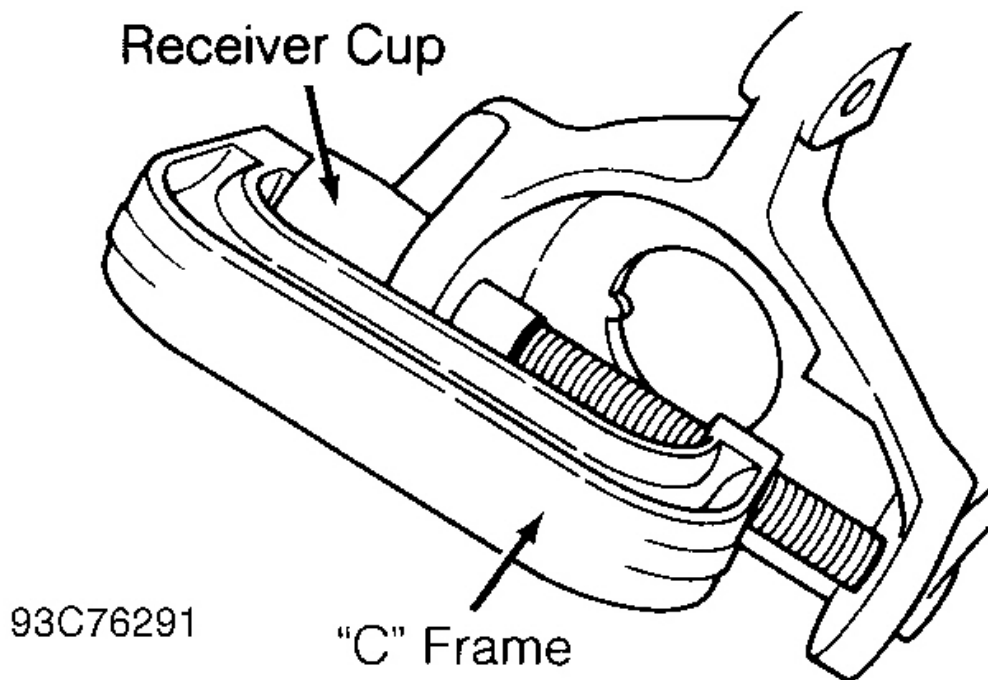
1. Lower ball joint must be installed first. Assemble "C" Frame, Receiver Cup (T80T-3010-A for Explorer and Ranger, or T80T-3010-A3 for Bronco and F150), and Installation Cup (T83T-3050-A for Explorer and Ranger; D81T-3010-A for Bronco and F150). See **Fig. 10** -13.
2. Turn forcing screw to install ball joint. Ensure ball joint is fully seated. To install upper ball joint, assemble "C" Frame, Receiver Cup (T80T-3050-A for Explorer and Ranger; T80T-3010-A3 for Bronco and F150), and Installation Cup (T83T-3050-A for Explorer and Ranger; D80T-3010-A for Bronco and F150). See **Fig. 10** -13.
3. Turn forcing screw to install ball joint. Ensure ball joint is fully seated. Install snap ring on ball joints, and install steering knuckle.



**Fig. 10: Lower Ball Joint Removal**  
Courtesy of FORD MOTOR CO.

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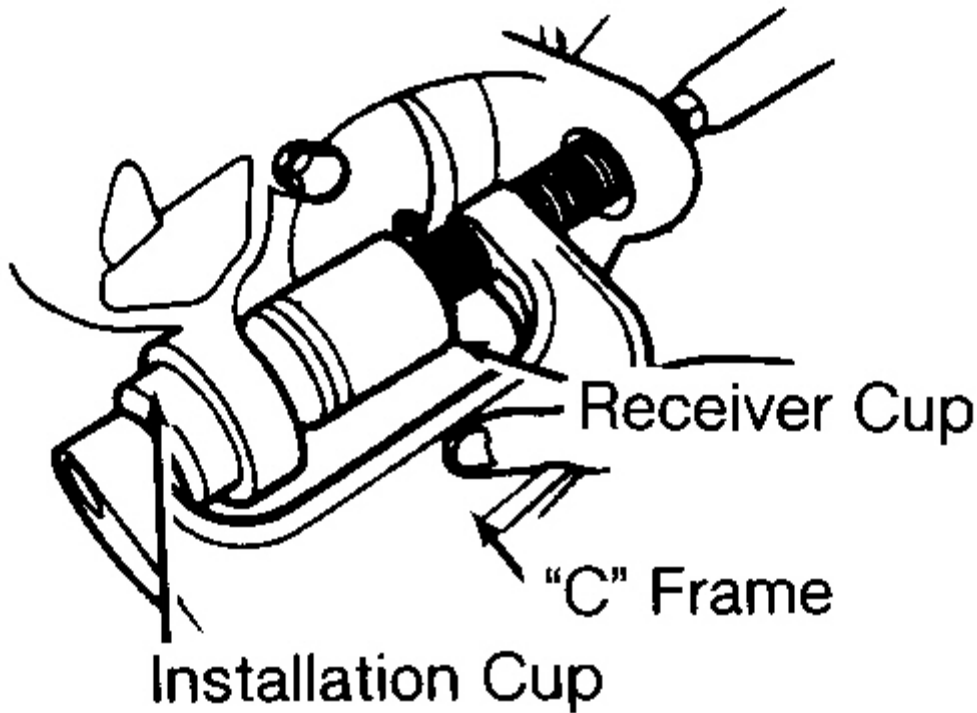
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**Fig. 11: Upper Ball Joint Removal**  
Courtesy of FORD MOTOR CO.

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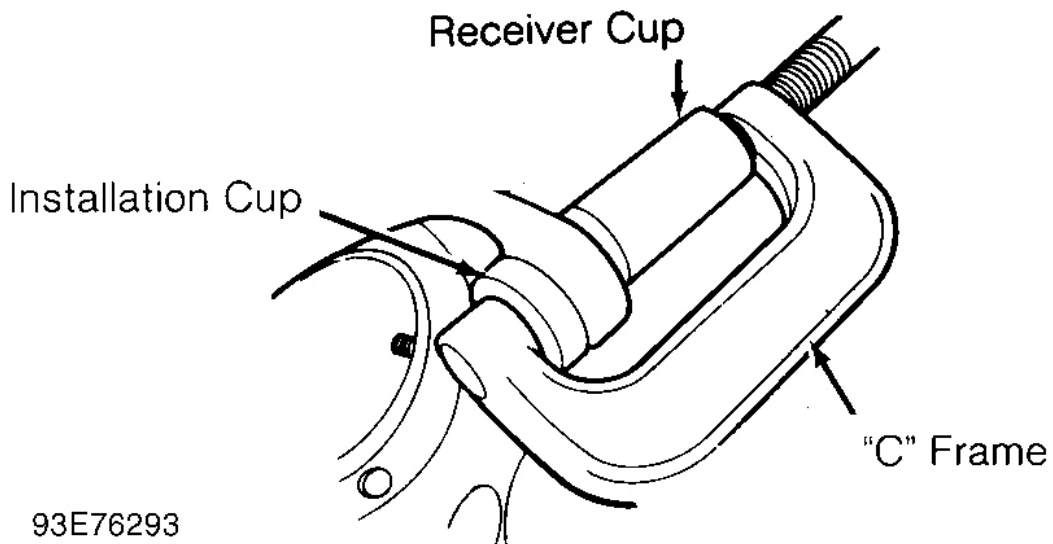


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**Fig. 12: Lower Ball Joint Installation**  
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**Fig. 13: Upper Ball Joint Installation**  
Courtesy of FORD MOTOR CO.